

ABSTRACT OF THE DISCLOSURE

The AM demodulator includes the APC detection circuit that compares phases of the AM-modulated input signal and the signal output from VCO. However, the APC detection
5 circuit multiplies the two signals before their comparison. As a result, even if the phases of the input signal or the signal output from VCO is shifted by 180 degrees, the result of comparison by the APC detection circuit is not influenced due to the phase shift. Moreover, in the case where a signal
10 detected by the AM detection circuit is in a predetermined potential range showing over-modulation, an operation of a PLL circuit is rest.